Bruhath Bengaluru Mahanagara Palike

Name of work:Improvements to roads and drains in Ramachandrapura and doddabommasandra in Ward No.10 Doddabommasandra

						Estimated Cost:22.00 Lakhs			
Sl No	Description of Items	No	Length (m)	Width (m)	Depth (m)	Quantity	Unit	Rate	Amount
1	KSRRB 300-3. **Earthwork excavation by manual means** for roads, drains & similar works in ordinary soil invoiving , excavated surface leveled & sides neatly dressed , the disposed earth to be levelled neatly after breaking of clods complete as per specification MORTH/ Chapter 3. **(Page No. 142/ Item No. 19.1/ PWD SR 2018-19)**								
	Desilt								
	Kateramma Layout								
	Temple Behind Main Road	1	36.00	0.60	0.45	9.72			
	2nd Main Road	2	122.00	0.60	0.45	65.88			
	Ramayya Layout								
	2nd B Cross Road	1	62.00	0.60	0.45	16.74			
	For CC Road								
	Muneshwara Layout								
	6th cross road	1	40.00	4.00	0.15	24.00			
		2	70.00	0.75	0.15	15.75			
	For Asphalt Road								
	Kateramma Layout								
	Road Cutting Portion								
	Temple Behind Main Road	2	36.00	0.80	0.25	14.40			
	2nd Main Road	2	156.00	0.70	0.25	54.60			
	Ramayya Layout								
	Apoorva Apartment Back Side Road	2	38.00	0.70	0.25	13.30			
	2nd B Cross Road	2	62.00	0.90	0.25	27.90			
						242.29	**Cum**	**219.80**	**53255.34**
	Basic Rate	130.00							
	Loading and Unloading	57.00							
	Lead For 10km=(10*1.25*2)	25.00							
	Area Weightage 6%	7.80							
	Data Rate	**219.80**							
2	Removing and refixing stone slabs of drains and pointing in CM (1:3) **(Page No. 27/ Item No.5.33/ PWD SR 2018-19)**								
	R&R Slabs								
	Kateramma Layout								
	Temple Behind Main Road	1	36.00	0.90		32.40			
	2nd Main Road	2	122.00	0.90		219.60			
	Ramayya Layout								
	2nd B Cross Road	1	62.00	0.75		46.50			
						298.50			
		Consider 15% of Missing Slabs				41.00			
						257.50	**Sqm**	**111.30**	**28659.75**
	Basic Rate	105.00							
	Area Weightage 6%	6.30							
	Data Rate	**111.30**							
3	Providing granite slabs of selected quality roughly dressed having a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.**(Page No. 27/ Item No.5.31.2/ PWD SR 2018-19)**								
	Qty Same As per Vide Item No.02 of Missing Slabs					41.00			
						41.00	**Sqm**	**966.72**	**39635.52**
	Basic Rate	912.00							
	Area Weightage 6%	54.72							
	Data Rate	**966.72**							

Sl No	Description of Items	No	Length (m)	Width (m)	Depth (m)	Quantity	Unit	Rate	Amount
4	KSRB 5-8.1 : Providing one line dressing to granite stone slab / granite stone masonry as per specifications .KBS 5.1.13**(Page No. 26/ Item No.5.17/ PWD SR 2018-19)**								
	Qty Same As per Vide Item No.03					41.00			
						41.00	**Sqm**	**950.82**	**38983.62**
	Basic Rate	897.00							
	Area Weightage 6%	53.82							
	Data Rate	**950.82**							
5	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202 **(Page No-140 Item no - 18.47 of KPWD SR 2018-19)**								
	For CC Road								
	Muneshwara Layout								
	6th cross road	1	40.00	4.00	0.20	32.00			
		2	70.00	0.75	0.20	21.00			
						53.00	**Cum**	**965.44**	**51168.32**
	Basic Rate	899.00							
	Lead For 5km=(5*1.25*2)	12.50							
	Area Weightage 6%	53.94							
	Data Rate	**965.44**							
6	KSRRB 300-49. Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by manual means without disturbing the base and stacking of the debris materials including cost of all labour charges complete as per specifications. MORTH / Chapter 3 **(Page No. 146/ Item No.19.55/ PWD SR 2018-19)**								
	For Asphalt Road								
	Kateramma Layout								
	Road Cutting Portion								
	Temple Behind Main Road	2	36.00	0.80		57.60			
	2nd Main Road	2	156.00	0.70		218.40			
	Ramayya Layout								
	Apoorva Apartment Back Side Road	2	38.00	0.70		53.20			
	2nd B Cross Road	2	62.00	0.90		111.60			
						440.80	**Sqm**	**95.40**	**42052.32**
	Basic Rate	90.00							
	Area Weightage 6%	5.40							
	Data Rate	**95.40**							
7	KSRRB 300-Compaction KSRRB 300-58. Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specifications. MORTH / Chapter 3 **(Page No-147 Item no - 19.64 of KPWD SR 2018-19)**								
	For CC Road								
	Muneshwara Layout								
	6th cross road	1	40.00	4.00		160.00			
		2	70.00	0.75		105.00			
	For Asphalt Road								
	Kateramma Layout								
	Road Cutting Portion								
	Temple Behind Main Road	2	36.00	0.80		57.60			
	2nd Main Road	2	156.00	0.70		218.40			
	Ramayya Layout								
	Apoorva Apartment Back Side Road	2	38.00	0.70		53.20			
	2nd B Cross Road	2	62.00	0.90		111.60			
						705.80	**Sqm**	**6.36**	**4488.89**
	Basic Rate	6.00							

Sl No	Description of Items	No	Length (m)	Width (m)	Depth (m)	Quantity	Unit	Rate	Amount
	Area Weightage 6%	0.36							
	Data Rate	**6.36**							
8	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap I basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve thedesired density complete as per specifications. MORTH Specification No. 406 **(Page No-158 Item no - 20.18 of KPWD SR 2018-19)**								
	For Asphalt Road								
	Kateramma Layout								
	Road Cutting Portion								
	Temple Behind Main Road	2	36.00	0.80	0.25	14.40			
	2nd Main Road	2	156.00	0.70	0.25	54.60			
	Ramayya Layout								
	Apoorva Apartment Back Side Road	2	38.00	0.70	0.25	13.30			
	2nd B Cross Road	2	62.00	0.90	0.25	27.90			
						110.20	**Cum**	**2001.28**	**220541.06**
	Basic Rate	1888.00							
	Area Weightage 6%	113.28							
	Data Rate	**2001.28**							
9	KSRRB M2100-10. Providing and laying **Plain cement concrete of mix 1:3:6** with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. **(P.No-222,I No-27.18 PWD SR 2018-19)**								
	For CC Road								
	Muneshwara Layout								
	6th cross road	1	40.00	4.00	0.15	24.00			
		2	70.00	0.75	0.15	15.75			
						39.75	**Cum**	**5905.49**	**234743.10**
	Basic Rate	5115.00							
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-1079.39	Note:- (220*490.63/100)=1079.39						
	Add Cement cost as per Issue rate	1535.60	Note:- (220*349.00/50)=1535.60						
	Sub Total	**5571.21**							
	Area Weightage 6%	334.27							
	Grand Total	**5905.49**							
10	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) **(Page No. 175.tem No.22.6.1,PW,P & IWTD SR 2018-19)**								
	For CC Road								
	Muneshwara Layout								
	6th cross road	1	110.00	4.20	0.15	69.30			
						69.30	**Cum**	**6002.28**	**415958.28**
	Basic Rate	4916.00							

Sl No	Description of Items	No	Length (m)	Width (m)	Depth (m)	Quantity	Unit	Rate	Amount
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-1766.27	Note:- (360*490.63/100)=1766.27						
	Add Cement cost as per Issue rate	2512.80	Note:- (360*349.00/50)=2512.80						
	Sub Total	**5662.53**							
	Area Weightage 6%	339.75							
	Grand Total	**6002.28**							
11	KSRRB M500-6. Providing and applying primer coat with bitumen emulsion on prepared surface of granular base including clearing of road surface and spraying primer at the rate of 0.60 kg I sqm using mechanical means complete as per specifications.MORTH Specification No. 502 **(Page No-161 Item no - 21.6 of KPWD SR 2018-19)**								
	For Asphalt Road								
	Kateramma Layout								
	Road Cutting Portion								
	Temple Behind Main Road	2	36.00	0.80		57.60			
	2nd Main Road	2	156.00	0.70		218.40			
	Ramayya Layout								
	Apoorva Apartment Back Side Road	2	38.00	0.70		53.20			
	2nd B Cross Road	2	62.00	0.90		111.60			
						440.80	**Sqm**	**33.92**	**14951.94**
	As per Issue rate	32.00							
	Area Weightage 6%	1.92							
	Grand Total	**33.92**							
12	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen **(Page No-160 Item no - 21.17.6 of KPWD SR 2018-19)**								
	For Asphalt Road								
	Kateramma Layout								
	Road Cutting Portion								
	Temple Behind Main Road	2	36.00	0.80	0.05	2.88			
	2nd Main Road	2	156.00	0.70	0.05	10.92			
	Ramayya Layout								
	Apoorva Apartment Back Side Road	2	38.00	0.70	0.05	2.66			
	2nd B Cross Road	2	62.00	0.90	0.05	5.58			
						22.04	**Cum**	**8545.72**	**188347.67**
	As per Issue rate	8062.00							
	Area Weightage 6%	483.72							
	Grand Total	**8545.72**							
13	KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH specification clause 501 **(Page No-161 Item no - 21.2 of KPWD SR 2018-19)**								
	For Asphalt Road								
	Kateramma Layout								
	Temple Behind Main Road	1	36.00	4.30		154.80			
	2nd Main Road	1	156.00	4.10		639.60			
	Ramayya Layout								
	Apoorva Apartment Back Side Road	1	38.00	3.80		144.40			
	2nd B Cross Road	1	62.00	5.00		310.00			
						1248.80	**Sqm**	**5.30**	6618.64

Sl No	Description of Items	No	Length (m)	Width (m)	Depth (m)	Quantity	Unit	Rate	Amount
	Basic Rate	5.00							
	Area Weightage 6%	0.30							
	Grand Total	**5.30**							
14	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VGIO) on the prepared black topped surfaces at 2.5 kg per 10sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH **(Page No-161 Item no - 21.7 of KPWD SR 2018-19).**								
	For Asphalt Road								
	Kateramma Layout								
	Road Cutting Portion								
	Temple Behind Main Road	1	36.00	4.30		154.80			
	2nd Main Road	1	156.00	4.10		639.60			
	Ramayya Layout								
	Apoorva Apartment Back Side Road	1	38.00	3.80		144.40			
	2nd B Cross Road	1	62.00	5.00		310.00			
						1248.80	**Sqm**	**12.72**	**15884.74**
	As per Issue rate	12.00							
	Area Weightage 6%	0.72							
	Grand Total	**12.72**							
15	Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015. using – do – using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminus binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) **(P.No.171, I.No.21.78.12 of PWD BCSR 2018-19)**								
	For Asphalt Road								
	Kateramma Layout								
	Road Cutting Portion								
	Temple Behind Main Road	1	36.00	4.30	0.04	6.19			
	2nd Main Road	1	156.00	4.10	0.04	25.58			
	Ramayya Layout								
	Apoorva Apartment Back Side Road	1	38.00	3.80	0.04	5.78			
	2nd B Cross Road	1	62.00	5.00	0.04	12.40			
						49.95	**Cum**	**9972.48**	**498145.32**
	As per Issue rate	9408.00							
	Area Weightage 6%	564.48							
	Grand Total	**9972.48**							
16	KSRRB M800-13.Road Marking with Hot Applied ThermoplasticCompound with Reflectrising Glass Beads on Bituminous Surface/Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 **(P.No.182 & I.No.24.15 PWD 18-19)**								
	For Asphalt Road								
	Kateramma Layout								
	Road Cutting Portion								
	Temple Behind Main Road	2	36.00	0.10		7.20			
	2nd Main Road	2	156.00	0.10		31.20			
	Ramayya Layout								
	Apoorva Apartment Back Side Road	2	38.00	0.10		7.60			
	2nd B Cross Road	2	62.00	0.10		12.40			
						58.40	**Sqm**	**454.74**	**26556.82**

Sl No	Description of Items	No	Length (m)	Width (m)	Depth (m)	Quantity	Unit	Rate	Amount
	Basic Rate	429.00							
	Area Weightage 6%	25.74							
	Grand Total	**454.74**							
								Total Construction Cost	**1879991.31**
								GST Charges 12%	**225598.96**
								Tender Premium 5%	**93999.57**
								Sub Total	**2199589.83**
								Utility Shifting,Miscellaneous and Rounding off	**410.17**
								GRAND TOTAL	**2200000.00**
Rupees Twenty Two Lakh(s) Only									

Certificate

1) This Work Comes Within BBMP Limits.
2) Certified that personaly Inspected the Work Spot.
3) Certified that the Estimate is Prepared Based on CSR of PWD Bangalore Circle 2018-19 & issued rate Dated. 02/11/2021
4) Estimate is Prepared Making Use of essential itemof work as per site conditions in safest way of Execution in most economical way
5) This work is not include in any other program of work.

Assistant Engineer
Ward No.10

Asst. Executive Engineer
Vidyaranyapura Sub division
Bruhath Bengaluru Mahanagara Palike

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub-Division
Bruhath Bengaluru Mahanagara Palike

Executive Engineer
Byatarayanapura Division

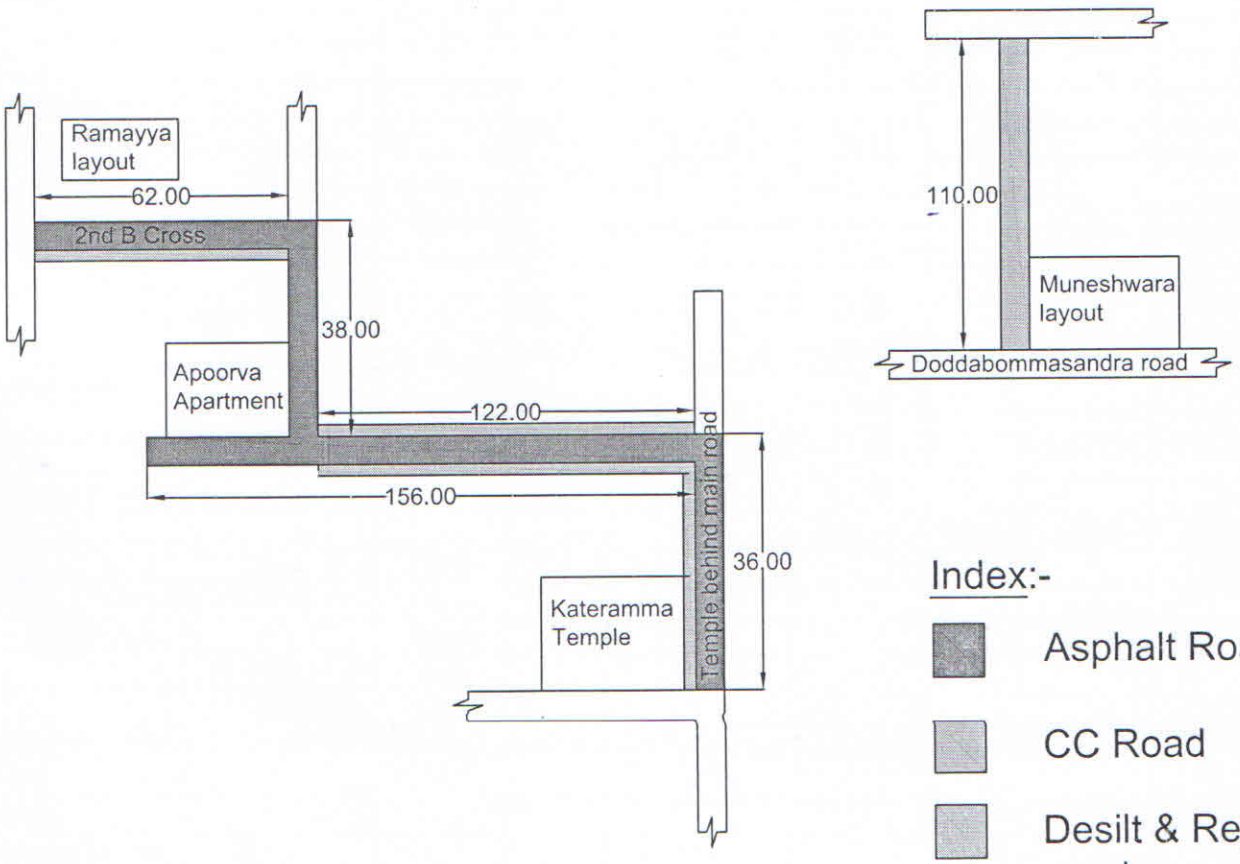
Administrative Approval
Accorded For 22.00 Lakhs
Head of A/C Pavt (P-3726)
CER NO : 81 Dt: 13/12/2021

ZA

CE (YNK)

Technical Sanction
Accorded For 22.00 Lakhs
Head of A/C Pavt (P-3726)
CER NO : 85 Dt: 13/12/2021

Name of Work : Improvements to Roads and drains in Ramachandrapura and doddabommasandra in Ward No. 10 Doddabommasandra



Index:-

- Asphalt Road
- CC Road
- Desilt & Repair work

Assistant Engineer
Ward No.10

Asst Executive Engineer
Vidyaranyapura Sub Divison

All Dimensions are in meters.